



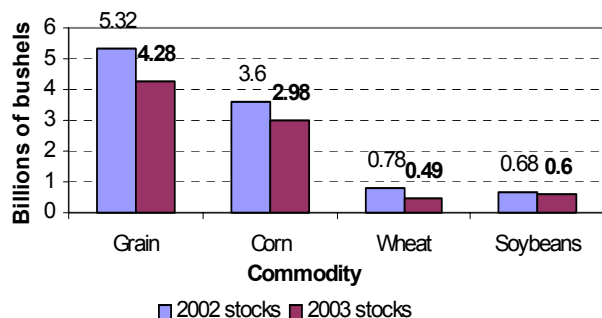
# GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service  
United States Department of Agriculture

AUGUST 21, 2003

<u>TM GRAIN TRANSPORT COST</u> <u>INDICATORS</u>	<u>Ocean</u>				
	<u>Truck</u>	<u>Rail</u>	<u>Barge</u>	<u>Gulf</u>	<u>PNW</u>
Indicator Value* for 08/21	101	169	94	152	154
Compared to Last Week	↑	↑	↑	↑	unchanged
*Indicator: Base Year 2000=100; Weekly Updates include Truck=Diesel; Rail=Nearby Secondary Rail Market; Barge=Spot Illinois River Basis; Ocean Vessel based on Routes to Japan					

Total Grain, Corn, Wheat, and Soybeans Stored in All Positions, by June 2002 and 2003



Data source: Grain Stocks, NASS, USDA, June 30, 2003

**June Total Grain Stocks Down in 2003.** Total grain stored in all positions as of June 1, 2003, was down 1.04 billion bushels for a total of 4.28 billion bushels, a 20-percent reduction, compared with June 2002 (see figure below). Fifty-two percent of the grain was stored on farms, while the remainder was stored in off-farm facilities. Fifty-one percent of grain was stored on farms during the previous June.

**Corn, Wheat, Soybeans Stored in All Positions Down in 2003.** As of June 1, 2003, corn stored in all positions totaled 2.98 billion bushels, down 612 million bushels or 17 percent, compared with June 1, 2002. Of the total corn stored, 1.62 billion bushels were stored on farms, down 20 percent from a year earlier. Off-farm stocks, at 1.36 billion bushels, were down 13 percent from the previous year.

All wheat stocks in all positions as of June 1, 2003, totaled 492 million bushels, a 37-percent reduction in stocks held a year ago. On-farm stocks, estimated at 132 million bushels, were down 39 percent from the previous June, while off-farm stocks, at 360 million bushels, were down 36 percent from a year earlier.

Soybeans stored in all positions as of June 1, 2003, totaled 602 million bushels, down 12 percent from a year earlier. On-farm stocks, at 273 million bushels, were down 10 percent, while off-farm stocks, at 330 million bushels, were down 14 percent from June 2002.

**Lower Stocks May Impact Grain Transportation.** Lower grain stocks may decrease the demand for transporting grain, increase transportation costs, and affect shippers' preferred transportation mode. Lower stocks result when domestic and foreign demand increases or remains at the current level while production is low. Grain-deficit regions may then have to purchase grain and oilseeds from nontraditional sources. In addition, if regions must haul grain from long distances, the cost for hauling grain may increase, forcing shippers to reevaluate their preferred mode of transportation. Grain prices may also increase. As grain prices increase, farmers are more willing to sell their grain, partially offsetting the decreased demand for transportation. [Surajudeen.Olowolayemo@usda.gov](mailto:Surajudeen.Olowolayemo@usda.gov).

Report is prepared by Deen Olowolayemo, Johnny Hill and Karl Hacker, Agricultural Economists, Transportation & Marketing, Agricultural Marketing Service, USDA (202) 690-1304. Support provided by Upper Great Plains Transportation Institute, North Dakota State University. This report can be found on the Internet at [www.ams.usda.gov/tmd/grain.htm](http://www.ams.usda.gov/tmd/grain.htm). E-mail comments and questions to [Surajudeen.Olowolayemo@usda.gov](mailto:Surajudeen.Olowolayemo@usda.gov).

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The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

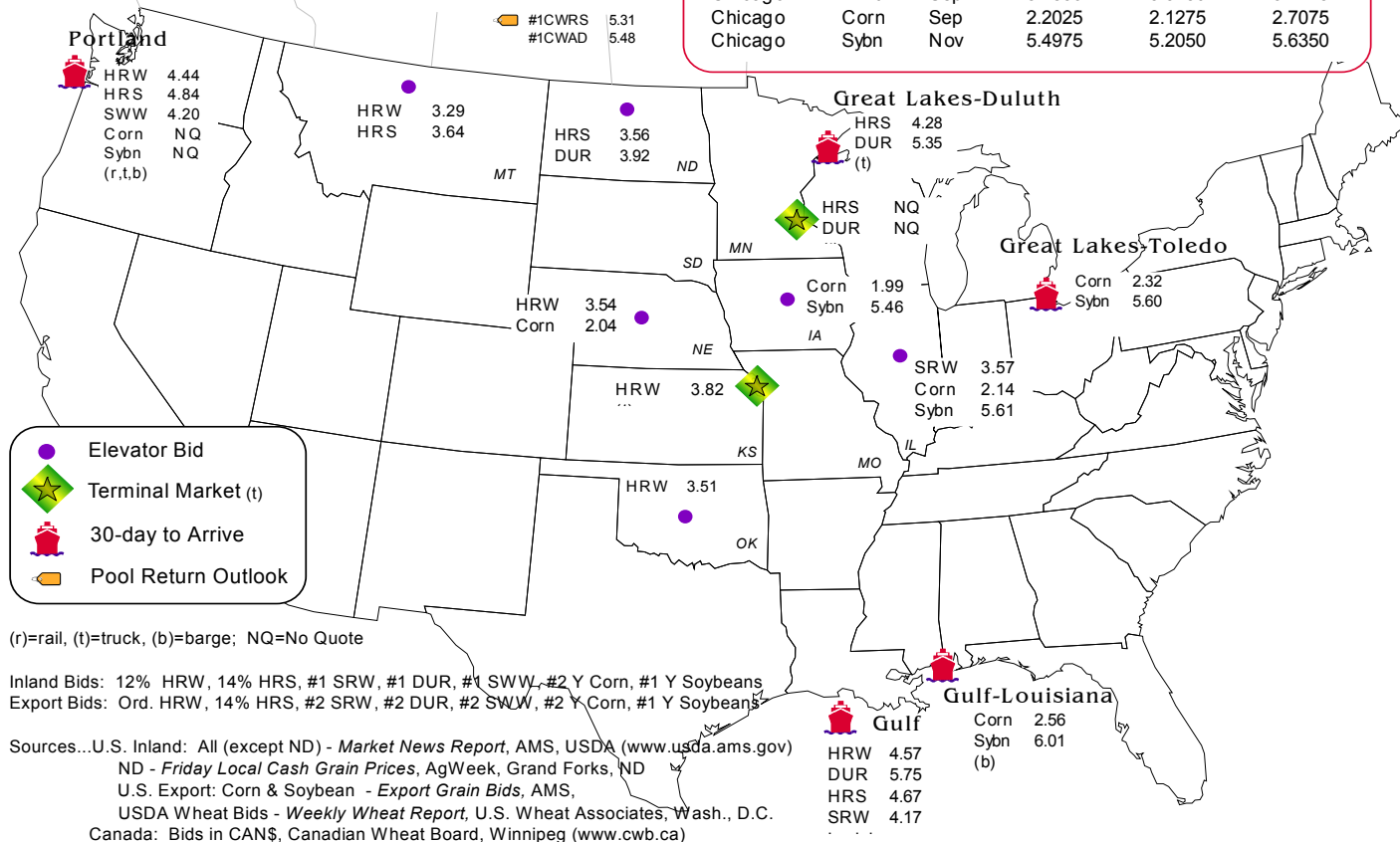
### Market Update: U.S. Origins to Export Position Price Spreads (Per Bushel)

Commodity	Origin-- Destination	This week	Last week
Corn	IL -- Gulf	-0.42	-0.40
Corn	NE -- Gulf	-0.52	-0.48
Soybean	IA -- Gulf	-0.55	-0.56
HRW	KS -- Gulf	-0.75	-0.74
HRS	ND -- Portland	-1.28	-1.06

The **Grain Bid Summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

## Grain Bid Summary

Futures:			08/15/2003	Week Ago 08/08/2003	Year Ago 08/16/2002
Kansas City	Wht	Sep	3.8125	3.5300	3.9100
Minneapolis	Wht	Sep	3.9600	3.6850	4.0550
Minneapolis	Dur	Sep	n.a.	n.a.	n.a.
Chicago	Wht	Sep	3.7850	3.5750	3.4775
Chicago	Corn	Sep	2.2025	2.1275	2.7075
Chicago	Sybn	Nov	5.4975	5.2050	5.6350

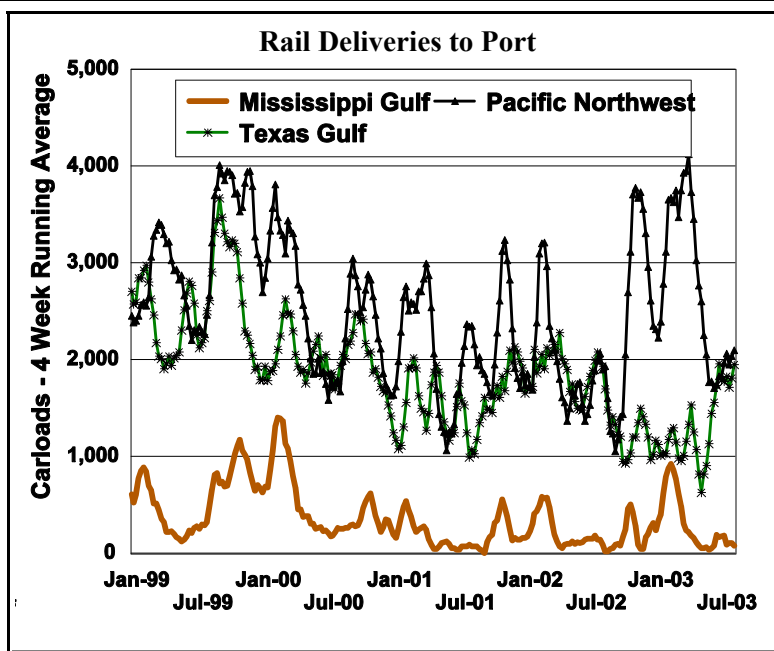
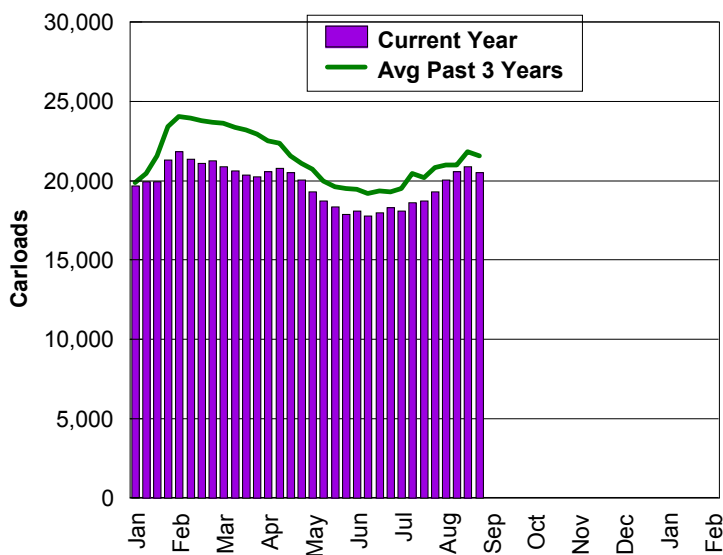


<b>RAIL TRANSPORTATION</b>
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**Rail Deliveries to Port (Carloads)**

	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total
Week Ending:					
07/30/03	133	1,764	2,447	104	4,448
08/06/03	22	2,227	2,092	128	4,469
YTD 2003	9,501	42,862	87,349	10,927	150,639
YTD 2002	7,084	59,791	62,492	14,674	144,041
% YTD 2002	134%	72%	140%	74%	105%
Total 2002	11,112	83,799	111,719	21,551	228,181
Total 2001	10,022	81,804	111,376	26,604	229,806

Source: Transportation &amp; Marketing/AMS/USDA; (\*) Incomplete Data

**Grain Car Loadings for Class I Railroads**

Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

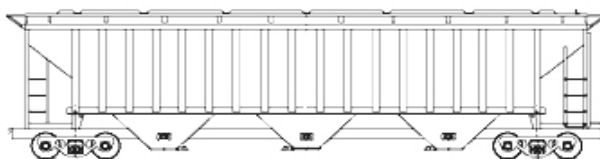
**Class I Rail Carrier Grain Car Bulletin** (Grain Carloads Originated and Grain Service Index)

	East		West			U.S. Total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
08/09/03	2,405	2,898	7,754	454	6,360	19,871	3,065	4,042
This Week Last Year	2,367	3,155	8,051	325	6,873	20,771	3,207	4,759
2003 YTD	88,083	102,757	229,614	12,136	206,104	638,694	108,232	112,343
2002 YTD	89,232	99,967	234,974	17,768	213,104	655,045	128,786	116,007
% of Last Year	99%	103%	98%	68%	97%	98%	84%	97%
2002 Total	142,760	164,745	400,179	27,161	344,296	1,079,141	191,835	195,765

**U.S. Rail Covered Hopper Cars Online Index\***

July-03	93.5	96.5	92.9	88.5	92.9	93.4
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Source: Association of American Railroads; \*Base Year =2001, Index based on Number of Covered Hopper Cars Online (available for Service).

**Tariff Rail Rates for Unit Train Shipments**

August 2003

Source: [www.bnsf.com](http://www.bnsf.com), approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu\*

Date Effective	Tariff Item	Commodity	Origin	Destination	Rate Per Car	Rate Per MT	Rate/Per Bushel*
08/04/03	113710	Wheat	Kansas City, MO	Galveston, TX	\$1,720	\$18.96	\$0.52
08/04/03	43521	Wheat	Minneapolis, MN	Portland, OR	\$4,148	\$45.72	\$1.24
08/04/03	46540	Wheat	St. Louis, MO	Houston, TX	\$1,795	\$19.79	\$0.54
08/04/03	113710	Wheat	Kansas City, MO	Laredo, TX	\$2,180	\$24.03	\$0.65
08/04/03	15507	Wheat	Chicago, IL	Albany, NY	\$1,834	\$20.22	\$0.55
08/04/03	31005	Corn	Minneapolis, MN	Portland, OR	\$3,050	\$33.62	\$0.85
08/04/03	1132.002	Corn	Chicago, IL	Baton Rouge, LA	\$1,845	\$20.34	\$0.52
08/04/03	1132.03	Corn	Council Bluffs, IA	Baton Rouge, LA	\$1,970	\$21.72	\$0.55
08/04/03	113210	Corn	Evansville, IN	Raleigh, NC	\$1,686	\$18.58	\$0.47
08/04/03	1132	Corn	Des Moines, IA	Laredo, TX	\$2,595	\$28.60	\$0.73
08/04/03	61110	Soybean	Minneapolis, MN	Portland, OR	\$3,030	\$33.40	\$0.91
08/04/03	1144	Soybeans	Chicago, IL	Baton Rouge, LA	\$2,736	\$30.16	\$0.82
08/04/03	1144	Soybeans	Council Bluffs, IA	Baton Rouge, LA	\$2,799	\$30.85	\$0.84
08/04/03	1144	Soybeans	Des Moines, IA	Laredo, TX	\$2,864	\$31.57	\$0.86
08/04/03	11441	Soybeans	Evansville, IN	Raleigh, NC	\$1,686	\$18.58	\$0.51

**Secondary Rail Car Market**

Average Premium/Discount to Tariff, \$/Car - Last Week

	Delivery Period			
	Sep-03	Oct-03	Nov-03	Dec-03
BNSF-GF	\$132	\$109	\$32	\$16
UP-Pool	\$16	\$22	\$15	\$12

Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and

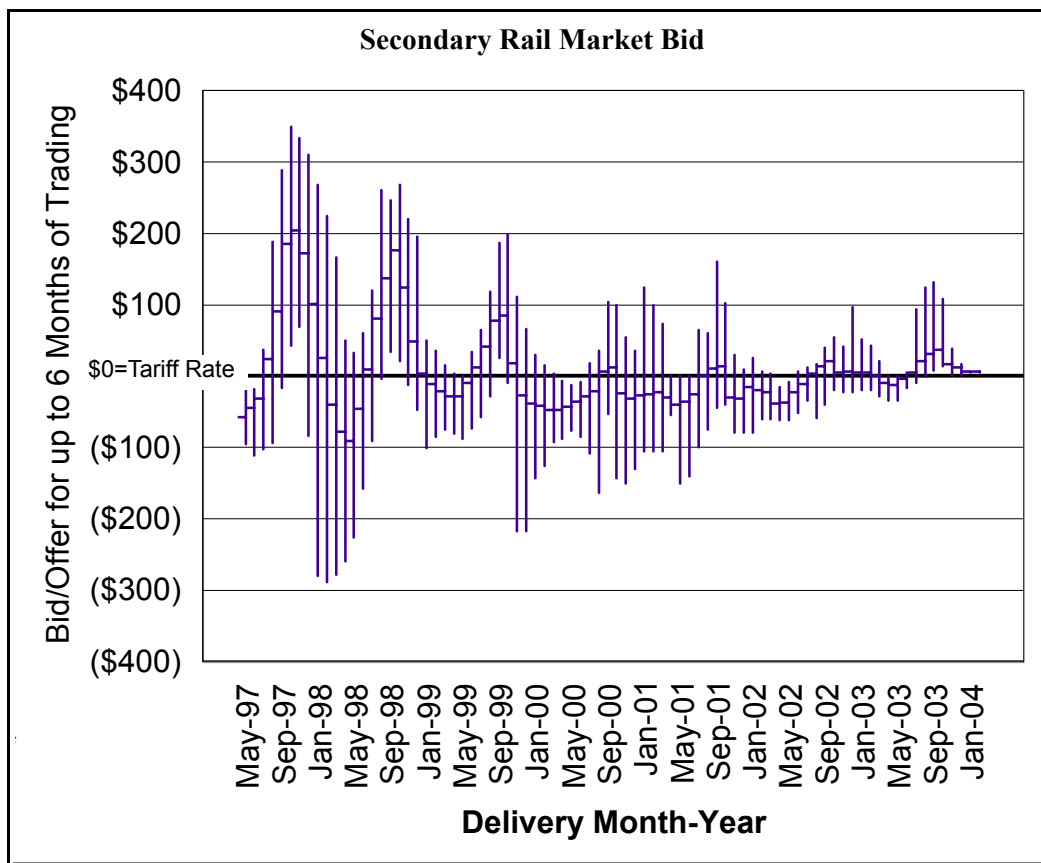
**Railroad Car 'Auction' Results**

Average Premium/Discount to Tariff, \$/Car - Last Auction

Delivery for:	Oct-03	Nov-03	Dec-03
COT/N. Grain	\$48	\$11	\$15
COT/S. Grain	no bid	\$0	\$0
GCAS/Region 1	\$1	\$1	\$1
GCAS/Region 2	\$1	no bid	no bid

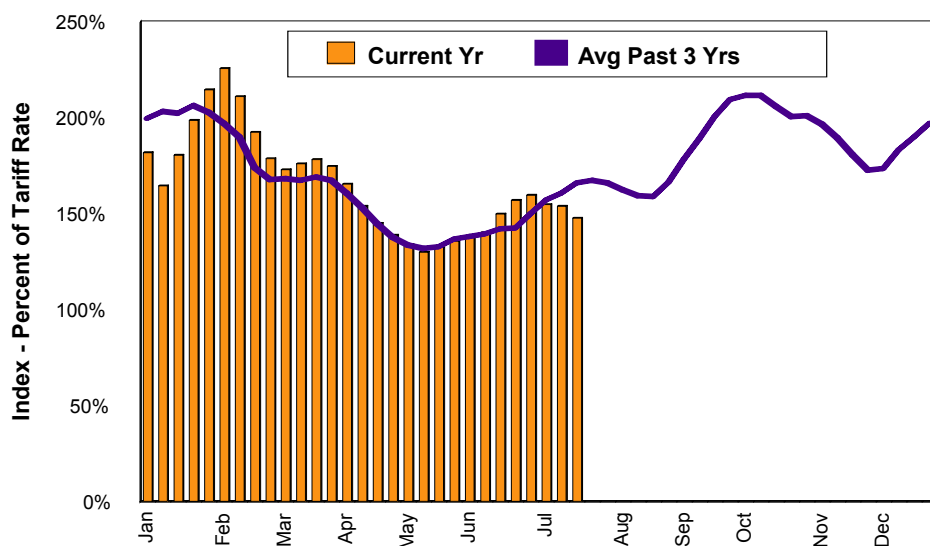
Source: Transportation &amp; Marketing/AMS/USDA.

COT=Certificate of Transportation; GCAS=Grain Car Allocation System



## BARGE TRANSPORTATION

**Illinois River Barge Rate Index - Rate Quotes**



The **Illinois River Barge Rate Index** averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The **Index**, along with **Rate Quotes** and **Futures Market** bids are indicators of grain transport supply and demand.

Calculating **Barge Rate** Per Ton:  
 $\text{Index} \times 1976 \text{ Tariff Benchmark Rate per Ton}$

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

### BARGE RATE QUOTES: Southbound Barge Freight Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

	8/13/03	8/6/03	Sept '03	Nov '03
Twin Cities	202	199	243	257
Mid-Mississippi	169	159	222	219
Illinois River	160	151	214	204
St. Louis	147	133	197	172
Lower Ohio	150	145	220	184
Cairo-Memphis	131	124	198	163

Source: Transportation & Marketing /AMS/USDA

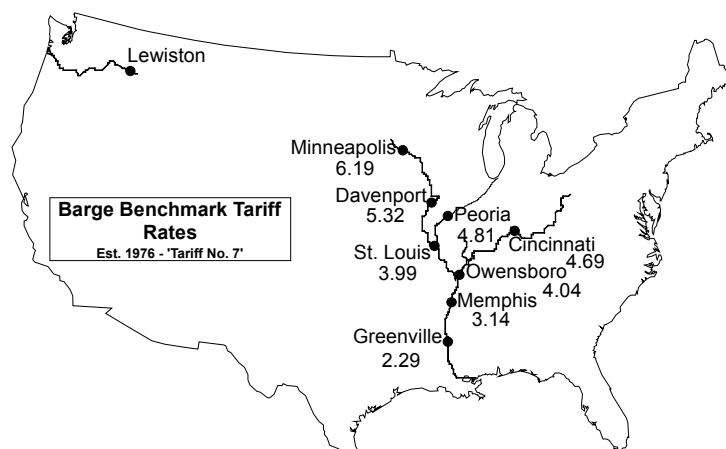
### BARGE FUTURES MARKET

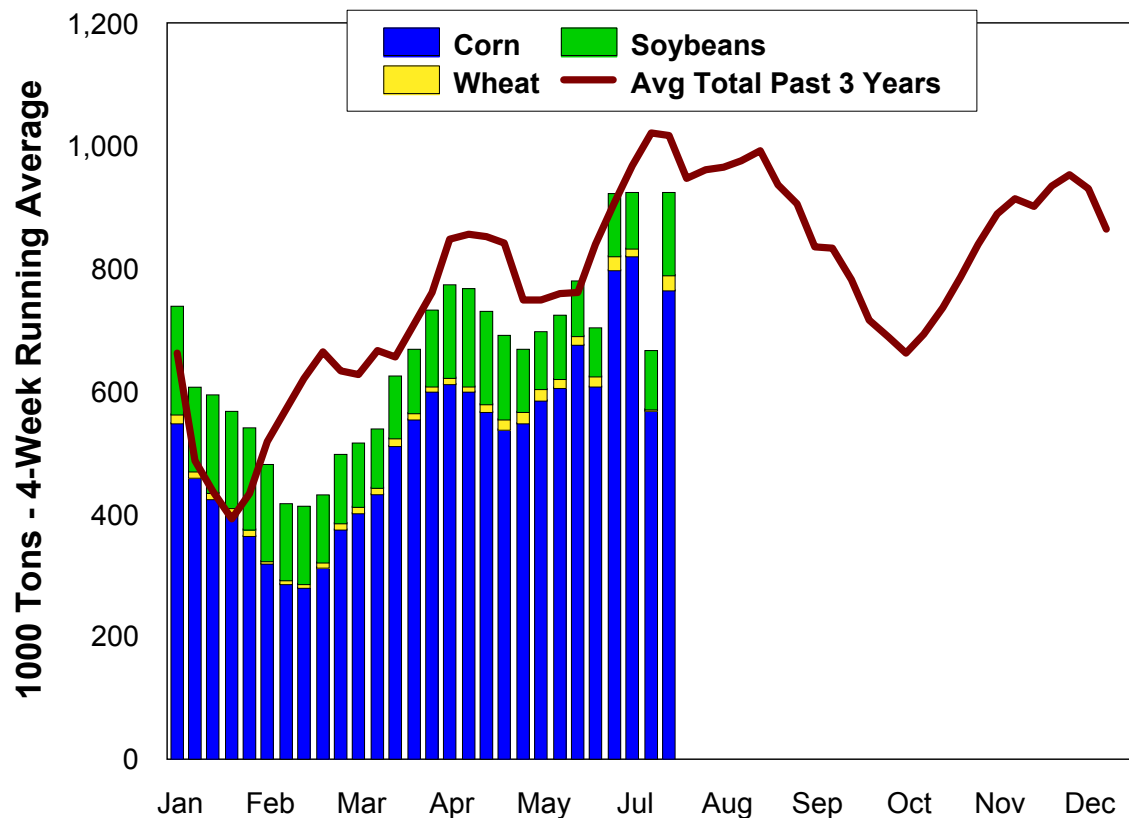
#### Southbound Barge Freight Nominal/Cash Basis Values

Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

Week ended	River/Region	Contract Period	Rate	
			Futures	Cash
8/19/03	St. Louis	Sep.	n/a	190
		Oct.	n/a	228
		Nov.	n/a	170
		Dec.	n/a	145
	Illinois River	Jan.	n/a	145
		Sep.	n/a	195
		Oct.	n/a	258
		Nov.	n/a	205
		Dec.	n/a	180
		Jan.	n/a	205

Source: St. Louis Merchants Exchange



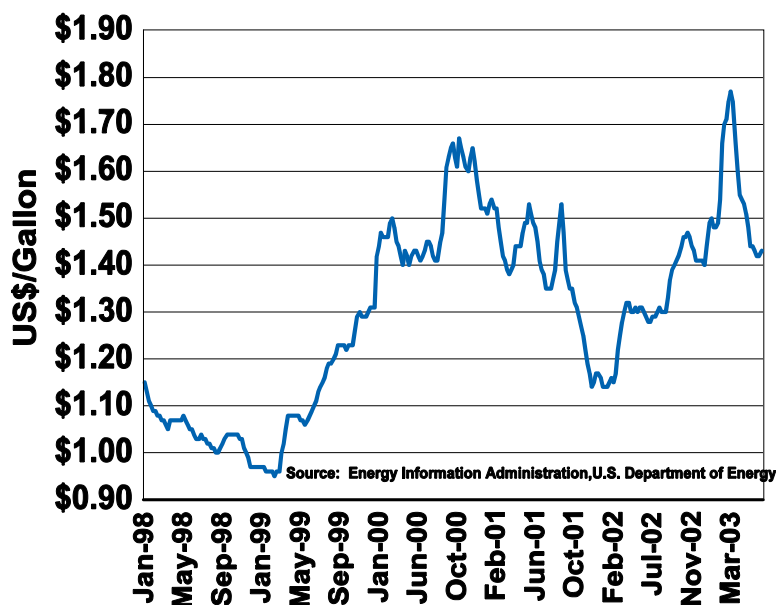
**Barge Movements on the Mississippi River (Lock 27)**
**Barge Grain Movements (1,000 Tons)**  
 for week ending 8/09/03

	<u>Corn</u>	<u>Wht</u>	<u>Sybn</u>	<u>Total</u>
<b>Mississippi River</b>				
Rock Island, IL (L15)	654	17	47	718
Winfield, MO (L25)	422	10	89	523
Alton, IL (L26)	514	22	129	666
Granite City, IL (L27)	533	24	139	698
<b>Illinois River (L8)</b>	87	15	43	145
<b>Ohio River (L52)</b>	5	33	3	55
<b>Arkansas River (L1)</b>	0	70	0	70
2003 YTD	18,337	1,472	5,232	25,533
2002 YTD	22,453	1,506	6,571	31,553
% of 2002 YTD	82%	98%	80%	81%
Total 2001	31,878	2,679	10,616	47,091

Source: U.S. Army Corp of Engineers,  
 YTD and Calendar year total includes Miss/27, Ohio/52 and Ark/1.

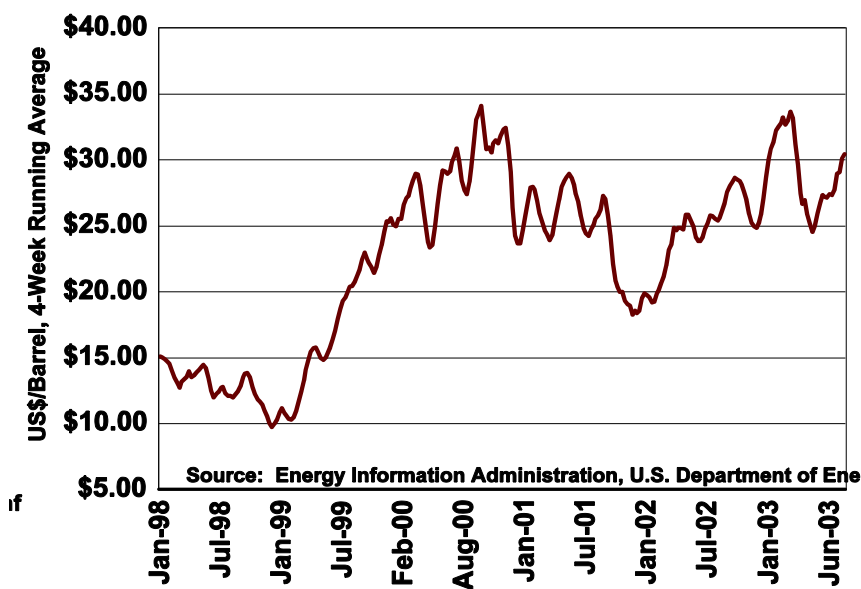
# TRUCK TRANSPORTATION

## Weekly U.S. Retail Road Diesel Price



The weekly **Diesel Price** provides a proxy for trends in U.S. truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

## Weekly Brent Crude Price, Friday Close



Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London.

### Crude Oil Prices (08/19/03)

US\$ per Barrel

	This Week	Last Week	
Light Sweet Crude (NYMEX)	30.43	31.46	↓
Brent Crude	28.91	30.23	↓

Source: [www.eia.doe.gov](http://www.eia.doe.gov); \*U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import



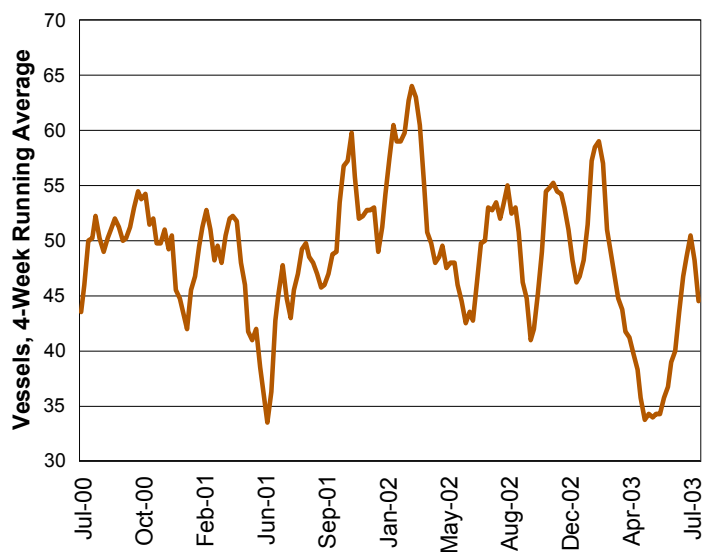
U.S. Export Balances (1,000 Metric Tons)									
	HRW	SRW	HRS	W h e a t SW W	DUR	All	C o r n *	S o y b e a n *	T o t a l
08/07/2003	1,997	401	1,219	578	210	4,405	6,934	7,539	18,878
This Week Year Ago	1,168	369	1,316	709	113	3,676	4,271	1,112	9,059
Commulative Exports-Crop Year									
03/04 YTD	1,949	698	928	620	149	4,422	37,234	28,293	69,949
02/03 YTD	1,757	617	1,006	579	198	4,079	44,621	28,973	77,673
01/02 Total	8,761	5,485	5,582	3,175	1,133	24,135	48,003	29,926	102,064
00/01 Total	9,314	4,445	5,775	5,156	1,130	25,819	47,734	27,567	101,120
99/00 Total	10,629	4,195	5,590	4,055	984	25,453	48,760	26,972	101,185
Source: Foreign Agricultural Service YTD-Year-to-Date (www.fas.usda.gov)									

Select U.S. Port Regions - Grain Inspections for Export (1,000 Metric Tons)												
	Pacific Region			Mississippi Gulf			Texas Gulf			Port Region Total		
	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Pacific	Mississippi	Texas
08/14/03	162	144	25	131	606	137	230	0	0	330	874	230
2003 YTD	5,054	3,195	2,720	3,168	17,745	10,394	3,424	529	56	10,969	31,306	4,010
2002 YTD	5,324	2,743	1,421	3,693	24,478	10,765	3,977	214	350	9,488	38,936	4,541
% of 2002 YTD	95%	116%	191%	86%	72%	97%	86%	247%	16%	116%	80%	88%
2002 Total	10,007	5,877	1,639	6,829	34,991	17,996	6,971	468	468	17,523	59,816	7,906
Source: Federal Grain Inspection Service				YTD-Year-to-Date								

The U.S. Exports Approximately One-Quarter of the Grain it Produces. On average, it includes nearly 45% of U.S. grown wheat, 35% of U.S. grown soybeans, and 20% of the U.S. grown corn.

Over 60% of these U.S. export grain shipments departed through Louisiana Gulf region in 2002.

**Gulf Port Region Grain Vessel Loading  
Past 7 Days**



#### Port Region Ocean Grain Vessels

	Gulf			Pacific Northwest	Vancouver B.C.
	<u>In Port</u>	<u>Loaded 7-Days</u>	<u>Due Next 10-Days</u>	<u>In Port</u>	<u>In Port</u>
08/07/03	28	47	65	10	7
08/14/03	35	36	69	9	12
2002 Range	(15..55)	(33..66)	(44..82)	(3..15)	(0..12)
2002 Avg	35	51	65	8	5

Source: Transportation & Marketing /AMS/ USDA

#### Quarterly Ocean Freight Rates

Average Rates & Percentage Changes, U.S. Dollars/Metric Ton

	2003 2 <sup>nd</sup> Qtr	2002 2 <sup>nd</sup> Qtr	% Change		2003 2 <sup>nd</sup> Qtr	2002 2 <sup>nd</sup> Qtr	% Change
<b>Gulf to</b>				<b>Pacific NW to</b>			
Japan	\$31.53	\$19.43	62%	Japan	\$19.33	\$11.03	75%
Mexico	-	\$46.92	-				
N. Europe	\$18.98	\$13.58	40%	<b>Argentina/Brazil to</b>			
N. Africa	\$21.75	\$15.84	37%	Med. Sea	\$24.50	\$16.98	44%
Med. Sea	\$21.88	\$12.62	73%	N. Europe	-	\$17.16	-
				China	\$32.50	-	-

Source: Transportation & Marketing/AMS/USDA

**Ocean Freight Rates for Selected Shipments - week ending 08/16/03**

<b>Export Region</b>	<b>Import Region</b>	<b>Grain</b>	<b>Month</b>	<b>Volume Loaded (Tons)</b>	<b>Freight Rate (\$Ton)</b>
U.S. Gulf	Algeria	Corn	Aug 20/21	23,000	\$27.00
U.S. Gulf	Angola	Corn	Oct 10/25	36,000	\$99.69*
U.S. Gulf	Ethiopia	Wheat	Aug 18/20	23,000	\$122.00*
U.S. Gulf	Japan	Heavy Grain	Sept 1/10	54,000	\$36.00
PNW	Bangladesh	Grains	Aug 1/10	5,000	\$44.00
River Plate	Philippines	Meals	Aug 12/20	40,000	\$35.25

Source: Maritime Research Inc.

Rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

\*Most food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are of limited availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.

<b>CANADIAN PORTS ACTIVITY</b>
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**Select Canadian Port Export Inspections** 1,000 Metric Tons, Week End Summary

	<u>Wheat</u>	<u>Durum</u>	<u>Barley</u>
06/19/2003			
Vancouver	105	5	
Prince Rupert			
Prairie Direct	5		
Thunder Bay	18		
St. Lawrence	4,492	2,329	290
2001/02 YTD	10,666	2,963	961
2002/03 YTD	4,620	2,334	290
% of Last Year	43%	79%	30%

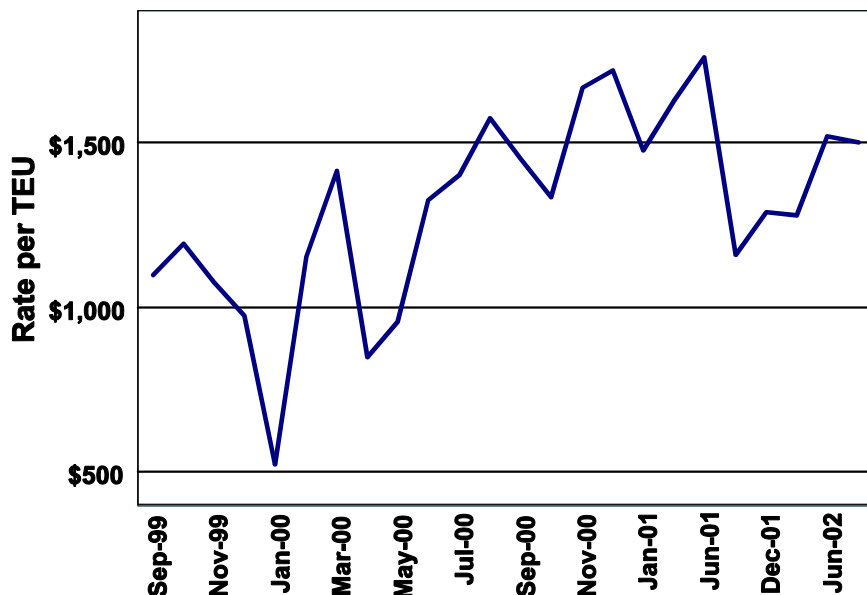
Source: Canadian Grains Commission, Crop Year 8/1-7/31

CONTAINER

**Container Ocean Freight Rates**

Average Rate per TEU, Weighed by Shipping Line Market Share

Source: Transportation &amp; Marketing/AMS/USDA, Quarterly Updates

**Container Rates - Soybeans**  
Seattle, WA Origin to Tokyo, Japan

Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.

**Container Rates - Feed Grain**  
Seattle, WA Origin to Selected Destinations